REMARKS

Claims 47-59 were pending. Claims 47-50, 53-57, and 59 have been amended for clarity. Claim 58 has been canceled. Claims 60 and 61 have been amended. Claims 47-57 and 59-61 are pending. This amendment follows a Request for Continued Examination (RCE) filed Mary 23, 2005.

Claims 47, 51, 52, 54, and 55 stand rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Pat. No. 4,942,459 to Hieda et al. Reconsideration of this rejection respectfully is requested.

Claim 47 recites a method of forming an imager pixel array comprising steps of "forming at least three photosensors each responsive to a different color of light," and "forming a plurality of charge storage capacitors, each respectively associated with one of said photosensors, a storage capacity of each said charge storage capacitor corresponding in proportion to a relative electron production capability of said respectively associated photosensor."

Hieda et al. discloses a color temperature detecting device in which the capacity of a capacitor for the green color component is half that for the red and blue color components. As discussed in previous responses, the red components have the lowest relative electron production, followed by green and then blue, which has the highest relative electron production. Hieda et al. discloses that the capacitor for the green color component is smaller than that for the blue color component; however, the capacitor for the red color component is larger than that for the green, and is the same as that for blue. Accordingly, Hieda et al. does not teach or suggest forming an imager pixel array with "at least three photosensors each responsive to at different color of light," and forming charge storage capacitors "each respectively associated with one of said photosensors," with "a storage capacity of each said charge storage capacitor corresponding in proportion to a relative electron production capability of said respectively associated photosensor." Claim 47 is patentable over Hieda et al. Claims 48-54 depend from claim 47 and are patentable over Hieda et al. for at least the same reasons.

Claim 55 recites a method of forming an imager pixel array comprising, *inter alia*, steps of "providing a plurality of photosensors comprising at least a first portion responsive to a first color of light, a second portion responsive to a second color of light, and a third portion responsive to a third color of light," and "forming a plurality of storage capacitors in electrical communication with a respective one of said first, second, and third portions of said plurality of photosensors, a storage capacity of each said storage capacitor corresponding in proportion with a relative electron production capability of each said respective photosensor."

Hieda et al. discloses forming a color temperature detecting device in which a capacitor for the green color component is half the size of that for the red and blue color components, whereas the relative electron production of the red color component is less than that of the green and blue color components. Hieda et al. does not teach a method of forming an imager pixel array from a plurality of photosensors having "at least a first portion responsive to a first color of light, a second portion responsive to a second color of light, and a third portion responsive to a third color of light," along with a storage capacitor "in electrical communication with a respective photosensor of said first, second, and third portions," a "storage capacity of each said storage capacitor corresponding in proportion with a relative electron production capability of each said respective photosensor." Claim 55 is patentable over Hieda et al. Claims 56, 57, and 59-60 depend from claim 55 and are patentable over Hieda et al. for at least the same reasons.

Claims 48-50, 56, and 57 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Hieda et al. in view of U.S. Pat. No. 6,489,992 to Savoye. Reconsideration of this rejection respectfully is requested.

Claims 48-50 depend from claim 47. Claim 47 is patentable over Hieda et al. Savoye does not cure the deficiencies of Hieda et al. Savoye has been cited as providing capacitors having storage capacities in the 3-20 femtofarad range. Savoye does not suggest forming "at least three photosensors each responsive to a different color of light" and charge storage capacitors "respectively associated with one of said photosensors," "a storage capacity of each said storage capacitor corresponding in proportion to a relative electron production capability of said respectively associated photosensor."

Moreover, the Office Action's asserted motivation for the combination, allowing low-light-level imaging, runs counter to the very purpose of Hieda et al. Hieda et al. provides a color temperature detecting device that operates "over a wide illuminance range without necessitating a complex arrangement." See col. 1, lines 60-64 of Hieda et al. The proposed motivation for combining the references comes not from the prior art, but instead appears to come only from an improper hindsight attempt to re-construct the invention of claim 47. Claim 47 is patentable over the proposed combination of Hieda et al. and Savoye. Claims 48-54 depend from claim 47 and are patentable over the proposed combination of Hieda et al. and Savoye for at least the same reasons.

Claims 56 and 57 depend from claim 55. Claim 55 is patentable over Hieda et al. Savoye does not cure the deficiencies of Hieda et al. Savoye is cited to provide capacitors having storage capacities in the 3-20 femtofarad range. Savoye does not suggest forming an imager pixel array with a plurality of photosensors having "at least a first portion responsive to a first color of light, a second portion responsive to a second color of light, and a third portion responsive to a third color of light," "forming a plurality of storage capacitors, each in electrical communication with a respective photosensor of said first, second, and third portions," a "storage capacity of each said storage capacitor corresponding in proportion with a relative electron production capability of each said respective photosensor."

Further, the proposed combination would result in a device that would not operate as proposed by Hieda et al. As noted above, the Hieda et al. device operates "over a wide illuminance range without necessitating a complex arrangement." As the Office Action admits, the 3-20 femtofarad-range capacitors of Savoye combines with Hieda et al. to offer low-level-light imaging. Further, the stated motivation for combining the references does not come from the prior art, which in fact teaches away from combining Hieda et al. and Savoye. Claim 55 is patentable over the proposed combination of Hieda et al. and Savoye. Claims 56, 57, and 59 depend from claim 55, and are patentable over the proposed combination of Hieda et al. and Savoye for at least the same reasons.

New claim 61 recites a method of forming an imager pixel array comprising the steps of "forming at least three photosensors each responsive to a different color of light," and "forming a plurality of charge storage capacitors, each respectively associated with one of said photosensors, a storage capacity of each said charge storage capacitor corresponding in proportion to a relative electron production capability of said respectively associated photosensor." Further, a "first portion of said at least three photosensors is responsive to red color light, and said charge storage capacitor respectively associated with each said photosensor of said first portion is formed with a storage capacity of between about 0 and about 20 femtofarads." Also, "a second portion of said at least three photosensors is responsive to green color light, and said charge storage capacitor respectively associated with each said photosensor of said second portion is formed with a storage capacity of between about 2 and about 20 femtofarads." In addition, "a third portion of said at least three photosensors is responsive to blue color light, and said charge storage capacitor respectively associated with each said photosensor of said third portion is formed with a storage capacity of between about 3 and about 20 femtofarads." Claim 61 is patentable over the cited prior art.

In view of the above amendment, applicant believes the pending application is in condition for allowance.

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Respectfully submitted,

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